PATENT COOPER					
From the INTERNATIONAL SEARCHING AUTHORITY	CKETED PCT 8 2005				
To: HAMILTON, BROOK, SMITH & REYNOLDS, P.C. Attn. Carroll, Alice O. 530 Virginia Road P.O. Box 9133 Concord, MA 01742-9133 UNITED STATES OF AMERICA	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH: REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION (PCT Rule 44.1)				
	Date of mailing (day/month/year) 05/09/2005				
Applicant's or agent's file reference 3194.1038002	FOR FURTHER ACTION See paragraphs 1 and 4 below				
International application No.	FOR FURTHER ACTION See paragraphs 1 and 4 below International filing date				
PCT/US2005/003287	(day/month/year) 03/02/2005				
Applicant	FOREIGN DÖCKETING				
MYKROLIS CORPORATION	10-5-05 ISR 12-5-05 WO 11-5-05 WOR				
	Completed By Syrx				
The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith. Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46): When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.					
Where? Directly to the International Bureau of WIPO, 34 1211 Geneva 20, Switzerland, Fas For more detailed instructions, see the notes on the accordance.	scimile No.: (41-22) 740.14.35				
2. The applicant is hereby notified that no international search	report will be established and that the deplacetion and				
Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith. With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:					
the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices. no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.					
4. Reminders Shortly after the expiration of 18 months from the priority date; the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.					
The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.					
Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.					
In respect of other designated Offices, the time limit of 30 months months.	(or later) will apply even if no demand is filed within 19				
See the Annex to Form PCT/IB/301 and, for details about the applic <i>Guide</i> , Volume II, National Chapters and the WIPO Internet site.					

Name and mailing address of the International Searching Authority

European Patent Office, P.B. 5818 Patentlaan 2

NL-2280 HV Rijswijk

Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,

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Authorized officer

Iveta Bujanska

Form PCT/ISA/220 (January 2004)

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the *PCT Applicant's Guide*, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report and the written opinion of the International Searching Authority, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only (see PCT Applicant's Guide, Annexes B1 and B2).

The attention of the applicant is drawn to the fact that amendments to the claims under Article 19 are not allowed where the International Searching Authority has declared, under Article 17(2), that no international search report would be established (see *PCT Applicant's Guide*, Volume I/A, paragraph 296).

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER ACTION as we	see Form PCT/ISA/220 Il as, where applicable, item 5 below.			
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)			
PCT/US2005/003287	03/02/2005	05/02/2004			
Applicant MYKROLIS CORPORATION					
This International Search Report has been according to Article 18. A copy is being tra	prepared by this International Searching Auth	ority and is transmitted to the applicant			
. This International Search Report consists (X It is also accompanied by a	of a total of <u>6</u> sheets. a copy of each prior art document cited in this r	report.			
Basis of the report a. With regard to the language, the ir language in which it was filed, unle	nternational search was carried out on the basi ess otherwise indicated under this item.	s of the international application in the			
The international s this Authority (Rule	earch was carried out on the basis of a transla $\approx 23.1(b)$).	tion of the international application furnished to			
b. With regard to any nucleon	tide and/or amino acid sequence disclosed in	n the international application, see Box No. I.			
2. Certain claims were foun	d unsearchable (See Box II).				
3. X Unity of invention is lacki	3. X Unity of invention is lacking (see Box III).				
4. With regard to the title, X the text is approved as sub-	• • • • • • • • • • • • • • • • • • • •				
the text has been established	ed by this Authority to read as follows:				
		•			
5. With regard to the abstract,					
the text is approved as subnthe text has been establishe may, within one month from	nitted by the applicant. d, according to Rule 38.2(b), by this Authority a the date of mailing of this international search	as it appears in Box No. IV. The applicant report, submit comments to this Authority.			
6. With regard to the drawings,	·				
	lished with the abstract is Figure No. 6				
as suggested by the X as selected by this A	applicant. Authority, because the applicant failed to sugge	st a figure.			
as selected by this A	authority, because this figure better characterize	•			
b. I none of the figures is to be published with the abstract.					

International application No. PCT/US2005/003287

INTERNATIONAL SEARCH REPORT

Box if Observations where certain claims were round disearchable (Continuation of Item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
1. X As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest.
No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-12

This invention concerns a method of purifying a transfer container comprising the step of purging the transfer container with a gas having a certain concentration. The problem to be solved is to reduce device contamination.

2. claims: 13-21

This invention is directed to a method and a system of transferring an object from a transfer container to a sealed chamber.

The problem to be solved is to improve the process control.

INTERNA . ONAL SEARCH REPORT

International Application No

PCT/US2005/003287 A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L21/00 H01L21/68 B01D46/00 B01D50/00 F24F3/16 According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system followed by classification symbols) B01D IPC 7 H01L F24F, Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ, WPI Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category 9 Relevant to claim No. US 2002/124906 A1 (SUZUKI YOKO ET AL) 12 September 2002 (2002-09-12) Χ 1-12 paragraphs [0011], [0220]; figures 57A,57B paragraphs [0243], [0245]; figure 68 χ 13 - 21Χ EP 1 067 583 A (EBARA CORPORATION) 1-1210 January 2001 (2001-01-10) paragraph [0042]; table 1 Χ paragraphs [0020], [0043]; figures 5,9 13 - 21Χ US 5 644 855 A (MCDERMOTT ET AL) 1 - 128 July 1997 (1997-07-08) column 9, line 29 - column 10, line 5 Χ EP 1 182 694 A (TOKYO ELECTRON LIMITED) 13-21 27 February 2002 (2002-02-27)
paragraphs [0041] - [0063]; figures 1,2 Further documents are listed in the continuation of box C. Patent family members are listed in annex. ° Special categories of cited documents : "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 0 5. 09.05 2 August 2005 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Angermeier, D

Fax: (+31-70) 340-3016

INTERNA. ONAL SEARCH REPORT

International Application No
PCT/US2005/003287

Category °	tion) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
4		1-12
	US 5 169 272 A (BONORA ET AL) 8 December 1992 (1992-12-08) column 1, line 59 - column 2, line 28	1-12
	cording 1, true 39 - cording 2, true 26	
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/US2005/003287

		T	7			
cited in se	Patent document Publication cited in search report date			Patent family member(s)		Publication date
US 200	02124906 A:	12-09-2002	JP EP WO TW US	2002261159 1343202 0247152 533174 2004187451	2 A1 2 A1 3 B	13-09-2002 10-09-2003 13-06-2002 21-05-2003 30-09-2004
EP 106	57583 A	10-01-2001	JP EP TW US US	2001077188 1067583 550220 2002129707 6364922	A2 B A1	23-03-2001 10-01-2001 01-09-2003 19-09-2002 02-04-2002
US 564	4855 A	08-07-1997	NONE			
EP 118	2694 A	27-02-2002	JP JP JP JP EP TW US	3552656 2002076090 3642729 2002164406 1182694 501194 2002048509	A B2 A A2 B	11-08-2004 15-03-2002 27-04-2005 07-06-2002 27-02-2002 01-09-2002 25-04-2002
US 5169	9272 A	08-12-1992	DE DE EP JP JP WO US US	0556193 3576162 6501815	T2 A1 B2 T A1 A	18-01-1996 27-06-1996 25-08-1993 13-10-2004 24-02-1994 14-05-1992 20-08-1996 06-12-1994

. ATENT COOPERATION TRE . Y

From the INTERNATIONAL SEARCHING AUTHORITY To: WRITTEN OPINION OF THE see form PCT/ISA/220 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43*bis*.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) Applicant's or agent's file reference FOR FURTHER ACTION see form PCT/ISA/220 See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/US2005/003287 -03.02.2005 05.02.2004 International Patent Classification (IPC) or both national classification and IPC. H01L21/00, H01L21/68, B01D46/00, B01D50/00, F24F3/16 Applicant MYKROLIS CORPORATION This opinion contains indications relating to the following items: Box No. I Basis of the opinion ☐ Box No. II Priority Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability Box No. Ⅳ Lack of unity of invention Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial Box No. V applicability; citations and explanations supporting such statement ☐ Box No. VI Certain documents cited Box No. VII Certain defects in the international application Box No. VIII Certain observations on the international application **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later. For further options, see Form PCT/ISA/220. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA:



European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx; 523656 epmu d Fax: +49 89 2399 - 4465 Authorized Officer

Angermeier, D

Telephone No. +49 89 2399-2283



International application No. PCT/US2005/003287

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	Вс	X N	o. I Basis of the opinion
1.	Wi the	ith re e lan	egard to the language , this opinion has been established on the basis of the international application in guage in which it was filed, unless otherwise indicated under this item.
		lai	nis opinion has been established on the basis of a translation from the original language into the following nguage , which is the language of a translation furnished for the purposes of international search nder Rules 12.3 and 23.1(b)).
2.	Wi ne	th re	egard to any nucleotide and/or amino acid sequence disclosed in the international application and early to the claimed invention, this opinion has been established on the basis of:
	a. t	type	of material:
			a sequence listing
			table(s) related to the sequence listing
	b. f	form	at of material:
			in written format
			in computer readable form
	c. t	ime	of filing/furnishing:
	ļ		contained in the international application as filed.
	ļ		filed together with the international application in computer readable form.
			furnished subsequently to this Authority for the purposes of search.
3.		cop	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto been filed or furnished, the required statements that the information in the subsequent or additional bies is identical to that in the application as filed or does not go beyond the application as filed, as propriate, were furnished.
4.	Add	ditior	nal comments:

International application No. PCT/US2005/003287

	Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability					
The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:						
	the entire international application,					
\boxtimes	claims Nos. 13-19					
be	because:					
	the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):					
\boxtimes	the description, claims or drawings (indicate particular elements below) or said claims Nos. 13-19 are so unclear that no meaningful opinion could be formed (specify):					
	see separate sheet					
	the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.					
	no international search report has been established for the whole application or for said claims Nos.					
	the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:					
	the written form		has not been furnished			
			does not comply with the standard			
	the computer readable form		has not been furnished			
	,		does not comply with the standard			
	the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.					
\boxtimes	See separate sheet for further details					

International application No. PCT/US2005/003287

Box No. IV Lack of unity of it	nvention			
1. In response to the invitation (Form PCT/ISA/206) to pay additional fees, the applicant has:				
□ paid additional fees.				
☐ paid additional fees under protest.				
☐ not paid additional fe	es.			
2. This Authority found that the the applicant to pay addition	requirement of unity of invention is not complied with and chose not to invite al fees.			
3. This Authority considers that the	requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3			
☐ complied with				
☐ not complied with for the follow	wing reasons:			
see separate sheet				
4. Consequently, this report has be-	en established in respect of the following parts of the international application:			
⊠ all parts.	·			
☐ the parts relating to claims No	s.			
Box No. V Reasoned stateme industrial applicability; citation	ent under Rule 43 <i>bis</i> .1(a)(i) with regard to novelty, inventive step or as and explanations supporting such statement			
1. Statement				
Novelty (N)	Yes: Claims No: Claims 1,20			
Inventive step (IS)	Yes: Claims No: Claims 1-12, 20, 21			
Industrial applicability (IA)	Yes: Claims 1-12, 20, 21 No: Claims			
2. Citations and explanations				

see separate sheet

International application No. PCT/US2005/003287

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

Re Item III.

1.0 Although claims 13 and 19 have been drafted as separate independent method claims, they appear to relate effectively to the same subject-matter and to differ from each other only with regard to the definition of the subject-matter for which protection is sought and in respect of the terminology used for the features of that subject-matter. The aforementioned claims therefore lack conciseness and as such do not meet the requirements of Article 6 PCT.

Re Item IV.

The separate groups of inventions are:

1) Claims 1-12:

This invention concerns a method of purifying a transfer container comprising the step of purging the transfer container with a gas having a certain concentration.

The problem to be solved is to reduce device contamination.

2) Claims 13-21:

This invention is directed to a method and a system of transferring an object from a transfer container to a sealed chamber.

The problem to be solved is to improve the process control.

They are not so linked as to form a single general inventive concept (Rule 13.1 PCT).

Re Item V.

1.0 The following documents (D) cited in the Partial International Search Report are pertinent to this communication, the numbering will be adhered to in the rest of the procedure:

D1: US 2002/124906 A1 (SUZUKI YOKO ET AL) 12 September 2002 (2002-09-12)

- D2: EP-A-1 067 583 (EBARA CORPORATION) 10 January 2001 (2001-01-10)
- 2.0 The current application does not meet the requirements of Article 33(2) PCT, since the subject-matter of claims 1 and 20 is not new.
- 2.1 Regarding independent claim 1, Document D1 shows a method of purifying transfer container, comprising (see paragraphs 11 and 220, figures 57A and 57B): purging the transfer chamber with gas having a concentration of contaminants no greater than 100 part per trillion, the transfer chamber being not hermetically sealed.
 - Consequently, the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.
- 2.2 Document D2 is likewise novelty-destroying for the subject-matter of claim 1 (cf. paragraph 42, table 1).
- 2.3 Regarding independent claim 20, Document D1 reveals likewise a system for transferring an object between two environments, comprising (cf, Figures 57A, 57B and 68, paragraphs 11, 220, 243 and 245):
 - a) a non hermetically sealed transfer container, the container having an environment purged with a gas having a concentration of contaminants no greater than 100 parts per trillion.
 - b) a sealed chamber connected with the transfer container, and
 - c) a closable door configured to separate the environment of the sealed chamber from an environment of the transfer container when the door is closed.
 - Hence, the subject-matter of claim 20 lacks novelty in the sense of Article 33(2) PCT.
- 3.0 Dependent claims 2-12 and 21 not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of inventive step, the reasons being as follows:
 - The additional feature of the respective claims 2-12 and 21 is merely one of several straightforward possibilities from which the skilled person would select, in accordance

with circumstances, without the exercise of inventive skill (Article 33(3) PCT).

Re Item VII.

- 1) To meet the requirements of Rule 5.1(a)(ii) PCT, the documents D1 and D2 should be identified in the description and their relevant contents should be indicated.
- 2) The feature of the claims 1-12 are not provided with reference signs placed in parentheses (Rule 6.2 (b) PCT).

Re Item VIII.

1.0 In claims 1, 5-9 and 20 the expression "about" is vague and imprecise.

Therefore, the subject-matter of these claims is not clear (Article 6 PCT).